

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
22 April 2004 (22.04.2004)

PCT

(10) International Publication Number  
WO 2004/034398 A1

(51) International Patent Classification<sup>7</sup>: G11B 27/034, 27/10, H04N 5/85

(21) International Application Number: PCT/EP2003/010801

(22) International Filing Date: 29 September 2003 (29.09.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data: 02022765.8 11 October 2002 (11.10.2002) EP

(71) Applicant (for all designated States except US): THOMSON LICENSING S.A. [FR/FR]; 46 Quai A. le Gallo, F-92100 Boulogne-Billancourt (FR).

(72) Inventors; and

(75) Inventors/Applicants (for US only): ADOLPH, Dirk [DE/DE]; Wallbrink 2, 30952 Ronnenberg (DE). SCHILLER, Harald [DE/DE]; Apfelgarten 11, 30539 Hannover (DE). HÖRENTRUP, Jobst [DE/DE]; Vossstr. 35, 30161 Hannover (DE). OSTERMANN, Ralf [DE/DE]; Oberstr. 17, 30167 Hannover (DE). PETERS, Hartmut [DE/DE]; Ohweg 34, 30890 Barsinghausen (DE).

(74) Agent: RITTNER, Karsten; European Patent Operations, Karl-Wiechert-Allee 74, 30625 Hannover (DE).

(81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

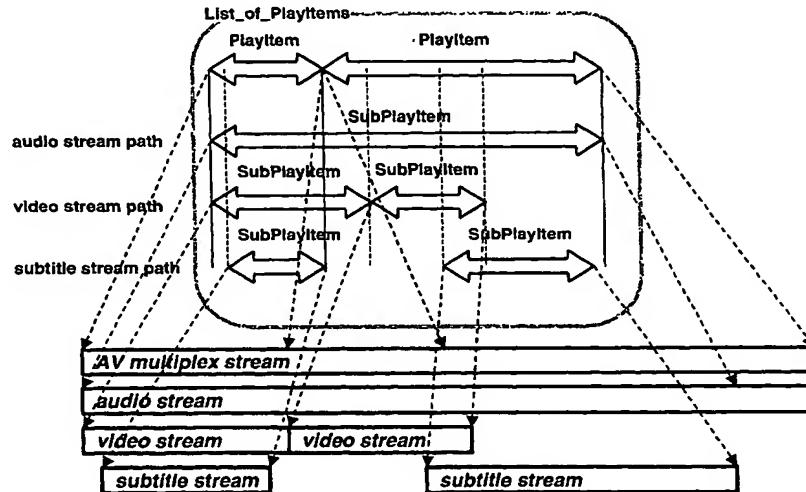
(84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:  
— with international search report

[Continued on next page]

(54) Title: METHOD AND APPARATUS FOR SYNCHRONIZING DATA STREAMS CONTAINING AUDIO, VIDEO AND/OR OTHER DATA

List\_of\_PlayItems Example



(57) **Abstract:** Several data streams contain video, audio and/or other data. Some of the data streams are pre-recorded in a multiplex on a storage medium while other data streams are located out of the data stream multiplex on the storage medium. The data streams are synchronized using a navigation file (List of PlayItems), which comprises descriptors (Play-Items, SubPlayItems) pointing to parts of said data streams, wherein said descriptors define the arrangement in time for said data streams by means of data sub stream paths.

WO 2004/034398 A1



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*